

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

**Listing of Claims:**

1-16. (Canceled)

17. (Currently Amended) A process for the manufacture of a membrane, comprising the steps of

(i) forming a porous substrate by a process comprising the steps of

- a. dispersing fibres in water to form a slurry;
- b. depositing the slurry formed in step (a) onto a mesh bed to form a fibre network;
- c. drying and compacting the fibre network formed in step (b); and
- d. applying before or after step (c), to the fibre network, a dispersion of a binder comprising both silica and a fluorinated polymer; and thereafter,

(ii) impregnating the ~~fibre matrix~~porous substrate with a polymeric material to produce a membrane.

18. (Previously Presented) A process according to claim 17, wherein step (ii) is carried out by nip roller coating of the substrate to fill it with a solution of ion-conducting polymeric material, and further compaction and drying of the membrane.

19.-22. (Canceled)

23. (Previously Presented) A process according to claim 17, wherein the fibres are randomly oriented in said porous substrate.

24. (Previously Presented) A process according to claim 17, wherein the silica comprises a colloidal aqueous solution, or a silica powder dispersed in water.

25. (Previously Presented) A process according to claim 17, wherein the fluorinated hydrocarbon polymer comprises one or more non-ion-conducting polymer(s).

26. (Previously Presented) A process according to claim 25, wherein the non-ion-conducting polymer is selected from the group consisting of polytetrafluoroethylene (PTFE), fluorinated ethylene-propylene (FEP), tetrafluoroethylene-ethylene (ETFE) copolymers, poly(vinylfluoride) (PVF) and poly(vinylidene fluoride) (PVDF).

27. (Previously Presented) A process according to claim 17, wherein the silica comprises a colloidal silica and the polymer comprises PTFE.

28. (Previously Presented) A process according to claim 17, wherein the ratio of silica to polymer is in the range of from 95:5% to 5:95% based on weight/weight solid materials in the binder mixture.

29. (Previously Presented) A process according to claim 28, wherein the ratio of silica to polymer is in the range of from 70:30% to 30:70% based on weight/weight solid materials in the binder mixture.

30. (Previously Presented) A process according to claim 29, wherein the ratio of silica to polymer is about 50:50% based on weight/weight solid materials in the binder mixture.

31. (Previously Presented) A process according to claim 17, wherein the mixed binder is in the form of a dilute aqueous dispersion.

32. (Previously Presented) A process according to claim 31, wherein the dilute aqueous dispersion has about 10% weight solids in the aqueous solution.

33. (Previously Presented) A process according to claim 17, wherein the fibres comprise at least one glass or silica.

34. (Previously Presented) A process according to claim 17, wherein the fibres have a diameter in the range of from 0.1 $\mu$ m to 50 $\mu$ m.